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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,290	01/13/2004	Ilonka Harezi	P00783-US-01 (20476.0001)	4481
22446	7590	08/10/2006	EXAMINER ROANE, AARON F	
ICE MILLER LLP ONE AMERICAN SQUARE, SUITE 3100 INDIANAPOLIS, IN 46282-0200			ART UNIT 3739	PAPER NUMBER

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/757,290	HAREZI ET AL.	
	Examiner	Art Unit	
	Aaron Roane	3739	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 21-23, 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20, 24 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/25/2005</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election with traverse of specie X and subspecie A in the reply filed on 5/5/2006 is acknowledged.

Regarding the traversal, as Applicant has not specifically addressed any arguments to the requirement of the election between species X and Y other than the claims are never species and the fact that species X and Y are both patentably distinct and mutually exclusive, the requirement for the election of specie X or specie Y is reaffirmed and made final.

Regarding Applicant's traversal of the requirement for the election of specie A or Specie B, Applicant has stated on the record that "subspecies A and B are not patentably distinguishable over one another," see page 10, 1<sup>st</sup> line of 3<sup>rd</sup> paragraph. The examiner reproduces the 1<sup>st</sup> full paragraph of page 4 of the previous requirement of election filed 3/3/2006 which states:

*Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.*

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Therefore the examiner has removed the requirement for the election between subspecies A and B and will treat subspecies A and B as not patently distinct from each of by Applicant's admission.

The examiner will examine claims 1-20, 24 and 27.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-20, 24 and 27 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

Applicant has disclosed/asserted that photons emitted from the presently claimed bulb assembly maybe used to irradiate a patient's body and deliver "the beneficial quantum information of the medicine or other substance directly to the patient's cells," see pages 9 and 17 of the present application. This is an inoperative utility for the following reason: The beneficial aspects or any beneficial aspects of medicines (or other substances) delivered to a patient's body/tissue are achieved through chemical interactions. These chemical interactions occur covalent bonding between molecules present in the patient's body (diseased tissue molecules, molecules present in the environment of the diseased tissue, and the like) and molecules introduced into the patient's body (medicine). These interactions are completely different than the

interaction between molecules present in the patient's body and an irradiating photon for several reasons. Interactions via chemical bonding are not transitory as are interactions via photon bombardment. The benefits of the direct interjection of medicines into the patient's body occur in part because the bonds and hence beneficial interactions have time to form, whereas the bombarding photons may be absorbed by the molecule present in the patient's body wherein the excite the molecule but have no way of creating the necessary bond responsible for the benefits the direct interjection of medicines into the patient's body.

Applicant has also providing some underlying scientific principles for operability of the presently claimed invention that are not directly applicable and/or support of the operability claimed.

On page 15, Applicant states that the molecules traveling through the vortex tube have a spin introduced to them by the vortex tube and this spin/rotation is in the same direction as the vortex tube. Any flowing fluid and in particular any fluid flowing in a channel, pipe or tube has rotation introduced to it. The rotations present in fluid flowing through a channel, pipe or tube occur along the entire interface of the fluid and the channel, pipe or tube directing the fluid flow and rotate in various directions not just a single direction. These rotations have no affect and/or interaction with absorption/emission of photons. Therefore the examiner does not appreciate the use of the vortex tube.

The Aharonov-Bohm effect mentioned on page 16 plays no part in the presently claimed invention. The Aharonov-Bohm effect/phenomenon is not relevant here due to

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the fact that the phenomenon related to the affect of a magnetic potential field, commonly denoted as A, on traveling electrons in the absence of a Magnetic field, B. That is although there is no magnetic field, B, present, a magnetic potential field, A, affects traveling electrons. This effect was verified through double-slit experiment. The point here is that it is not that the magnetic field, B, is simply zero at some instant in time, but the absence of the magnetic field entirely, that is the magnetic field is zero all the time and space or the magnetic field is static (constant in time), uniform (constant in space) and zero! In the presently claimed invention, the magnetic field, B, is not static and uniform, see pages 15 and 16. The examiner therefore doesn't appreciate the presence of the EM coil in the presently claimed invention and the noted Aharonov-Bohm Effect.

Next, on page 17, lines 5-8, Applicant asserts "while inside bulb assembly 10, a photon produced from the excited noble gas molecules inside shell 21 interacts with both the molecules moving through vortex tube 23 and with the electric potential V and magnetic potential A produced by coil 13. Through such interaction, the quantum information possessed by the photon is altered." The photon does not interact at all with the V and A potentials, or for that matter the E and B fields at any time, this is a very basic principle of Quantum Electrodynamics (an Abelian Gauge theory)

Due to the rejection based on inoperative and therefore lack of utility as noted above the examiner cannot even determine what prior art may be relevant in the presently claimed invention.

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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Roane whose telephone number is (571) 272-4771. The examiner can normally be reached on Monday-Thursday 7AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A.R. *A.R.*  
August 7, 2006

*Roy D. Gibson*  
ROY D. GIBSON  
PRIMARY EXAMINER